



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,624	02/25/2005	Harutun Manoukian	3687-99	5280
23117	7590	06/02/2009	EXAMINER	
NIXON & VANDERHYE, PC			YAN, REN LUO	
901 NORTH GLEBE ROAD, 11TH FLOOR				
ARLINGTON, VA 22203			ART UNIT	PAPER NUMBER
			2854	
			MAIL DATE	DELIVERY MODE
			06/02/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/516,624	MANOUKIAN, HARUTIUN	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ren L. Yan	2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 23 March 2009.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-30 is/are pending in the application.  
 4a) Of the above claim(s) 19-26 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-18 and 27-30 is/are rejected.  
 7) Claim(s) 2-4 and 6 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____ .

**DETAILED ACTION**

Claims 2-4 and 6 are objected to for the following deficiencies:

In claim 2, line 2, the recitation of “said assemblies” does not have proper antecedent basis.

In claim 3, line 2, the recitation of “said means to alternatively control said assemblies” also lacks proper antecedent basis.

In each of claims 4 and 6, the recitation of “said assembly” on line 2, respectively, lacks proper antecedent basis.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 8-10, 15, 17, 18 and 27-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Rasmussen(5,697,297).

With respect to claim 1, the patent to Rasmussen teaches the broadly recited station A-C, E or F as shown in Figs. 1A and 1B for applying one or more substances to a substrate, of the type comprising at least one mobile printing bridge(the ink and moisture system roller system 7 of each station), said station comprising means to install and means to control the mobile printing bridge to transform the mobile printing bridge from a screen printing station(shown in station C) to a digital printing station(the digital printing station was not shown, but was described as means for printing electronically generated images), or vice versa. The ink and moisture roller

system 7 comprises receiving means for the cassettes including fastening means for fastening the cassette to the ink and moisture roller system and keeping the cassette in an accurate alignment in relation to the impression cylinder 5. Thus the receiving means and the fastening means are the means equivalent to the means to install and means to control the mobile printing bridge to transform the mobile printing bridge from a screen printing station to a digital printing station, or vice versa as recited. See also the abstract, column 2, lines 4-33, and column 3, line 51 through column 4, line 28 in Rasmussen for details.

Regarding claim 3, Rasmussen teaches the inherent structure necessary to enable alternate application of screen printing or digital printing as claimed including the means to alternatively control said assemblies for screen printing or digital application of one or more substances comprise a programmable control device to perform at least one of the following functions: data exchange under the form of signals with at least one general control unit associated with a machine to apply substances in which said station is installed; movement of said mobile printing bridge; movement of one or more mobile parts during operation in screen printing mode, and halting of said one or more mobile members during operation in digital mode; and control of the printing heads during operation in digital mode.

Regarding claim 8, Rasmussen teaches a machine for applying substances to a substrate, of the type as claimed comprising a plurality of application stations A-F arranged along a common production line, at least one inherent unit for general control of said machine and means to transfer said substrate from one of said stations to another subsequent of said stations, characterized in that it comprises at least one station for applying one or more substances according to claim 1.

Regarding claim 9, Rasmussen teaches wherein at least one of said stations is set for digital application of said one or more substances and comprises at least one printing bridge which is movable in a direction perpendicular to the progress direction of said substrate. The ink and moisture roller system 7 in each of the printing stations is adjustable/movable in a direction perpendicular to the progress direction of the substrate 6. See column 3, lines 57-61 in Rasmussen.

Regarding claim 10, Rasmussen teaches wherein at least one of said stations is set for digital application of said one or more substances and comprises at least one fixed printing bridge (printing station D) which extends perpendicularly in relation to the progress direction of said substrate.

Regarding claim 15, Rasmussen teaches in Figs. 1A and 1B wherein at least one drying station 3 of said substances is provided interposed between at least two of said stations for applying said one or more substance to said substrate.

Regarding claim 17, since there is not structure being defined for the recited gripping units, the printing roller forming a nip with the impression cylinder 5 in each of the printing stations in the printing machine of Rasmussen qualifies as the substrate gripping unit as broadly recited.

Regarding claim 18, Rasmussen teaches wherein at least one of said stations is set for digital application of said one or more substances and at least another of said stations is set for screen printing application of said one or more substances. See Discussion regarding claim 1 above.

Regarding Claim 27, Rasmussen teaches the structure of a station as broadly recited for applying one or more substances to a substrate comprising at least one mobile printing bridge (the ink and moisture roller system 7) which is convertible between a digital mode and a silk-screen mode, said mobile printing bridge including at least one common frame having at least one common movable support (the receiving and fastening means) for use in both the digital mode and the silk-screen mode. See also the abstract, column 2, lines 4-33, and column 3, line 51 through column 4, line 28 in Rasmussen for details.

Regarding claim 28, Rasmussen teaches a machine for applying substances to a substrate as claimed including a plurality of application stations A-F arranged along a common production line, at least one inherent unit for general control of the machine and a unit to sequentially transfer the substrate from one of the stations to another of the stations, at least one of the stations A-C, E and F being convertible from a screen printing mode to a digital printing mode, or vice versa, as discussed above regarding claim 1, said at least one station including at least one common movable support (the ink and moisture roller system 7) to support both a doctor/scraper assembly 14 shown in Fig. 1A when in the silk-screen mode and a digital printing assembly when in the digital printing mode. See also the abstract, column 2, lines 4-33, and column 3, line 51 through column 4, line 28 in Rasmussen for details. shown in Figs. 1, 4a and 4b when screen printer 14 is retracted and inkjet printer 15 is substituted to affect the printing mode change.

Regarding claim 29, Rasmussen teaches all that is claimed wherein the mobile printing bridge includes at least one common frame (the ink and moisture roller system 7) having at least

one common movable support form part of both the digital printing station and the screen printing station.

Regarding claim 30, Rasmussen teaches all that is claimed wherein the common movable support (the ink and moisture roller system 7) alternately supports a doctor/scraping assembly 14 shown in Fig. 1A for the screen printing station and a digital printing assembly for the digital printing station.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rasmussen in view of Dubuit (6,397,740).

Regarding claim 2, Rasmussen teaches all that is claimed including the receiving and fastening means on the ink and moisture roller system 7 to install various cassettes for screen printing or digital application. However, the detailed structure of such receiving and fastening means is not shown.

Dubuit teaches in cl. 2, lines 62-67 and cl. 3, lines 28-40 wherein means to install said assemblies for screen printing or digital application of one or more substances comprise at least one pair of supporting elements to mount on a mobile printing bridge at least one doctor/doctor unit or at least one doctor/scraping unit of an assembly for applying one or more substances in screen printing mode, and Fig. 2 to mount at least a bar 27 to support a plurality of heads 28 for applying one or more substances in digital mode.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the means to install various cassettes in the printing machine of Rasmussen with a pair of supporting elements as taught by Dubuit so as to predictably provide support for the screen printing cassette or the digital printing cassette.

Claims 4-7 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rasmussen in view of Rodi(6,019,046).

Rasmussen teaches all that is claimed except that the type of digital printing cassette to be interchangeably installed in the printing machine was not specified.

The patent to Rodi teaches the very concept of providing a printing machine with replaceable units to allow different methods of printing to take place. Specifically, Rodi teaches the use of various types of printing units 4a-4e(inkjet, electrophotographic, offset, gravure printing types) so constructed so as to be removable from the printing machine frame and to be exchangeable with one another and all of the units are modular in design having identical mounting parts for mounting to the printing frame and identical standard plug connectors for a power supply and a data exchange with a electronic data processor. See the Figs. 1-3 and column 3, lines 12-28, column 4, lines 9-42 in Rodi for example.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the printing machine of Rasmussen with a single color or a multicolor inkjet printing unit as taught by Rodi as the means to electronically generate images so as to predictably carry out the digital printing operation.

With respect to claims 7 and 14, when a multicolor inkjet printing unit is installed in the printing machine of Rasmussen, as modified by Rodi, each of the multicolor inkjet print heads would be supplied with a different colored ink.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rasmussen in view of EP 0687560.

Rasmussen teaches all that is claim except for the use of a continuous conveyor belt to transferring the substrate from one station to another as recited.

EP 0687560 teaches in a multicolor printer the conventionality of using a continuous conveyor belt 2 for transferring the substrate being printed from one printing station to another(printing stations 6-9) in a linear conveying path. See Figs. 1-6 and the abstract in EP 0687560 for example.

In view of the teaching of EP 0687560, it would have been obvious to one of ordinary skill in the art to provide the printing machine of Rasmussen, with a linear substrate conveying path using a continuous conveyor belt in order to facilitate registration of the print image from one station to another and to ensure print quality.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ren L. Yan whose telephone number is 571-272-2173. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ren L Yan/  
Primary Examiner, Art Unit 2854  
June 1, 2009